REMARKS

Summary of the Amendment

Upon entry of the present Amendment, Claim 3 will have been amended, Claim 8 will have been cancelled, and new Claims 9 and 10 will have been added. Therefore, Claims 3 and 9-10 remain pending.

Summary of the Office Action

Claim 3 has been rejected under 35 U.S.C. §112, second paragraph as being indefinite, and under 35 U.S.C. § 102(b) as being anticipated by art of record.

Traversal of Rejection under 35 U.S.C. § 112, Second Paragraph

Claim 3 is rejected under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention.

With regard to Claim 3, lines 7-8, 10-11 and 12, the Examiner submits that the recited limitations, "the balance of light-emitting intensity between at least two portions respectively", "the balance of light-emitting intensity between the light portions", and "change of the balance" are unclear. In particular, the Examiner states that the intended meaning of the term "balance of light-emitting intensity" is not clear and that the claim should clarify in some manner whether this balance refers to either the generated intensity level between the light-emitters, the phase difference or the pulse frequency between the light-emitters.

Applicant's Claim 3, as amended, no longer includes the aforementioned "balance" terminology/language. Accordingly, Applicant respectfully requests that the Examiner reconsider and withdraw the rejection of Claim 3 under 35 U.S.C. §112, second paragraph, and indicate that Claim 3 is fully in compliance with the requirements of the statute.

Traversal of Rejection under 35 U.S.C. § 102(b)

Claim 3 is rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Publication No. 20002/0000514 A1 to Haas et al. [hereinafter "HAAS"].

With regard to Claim 3, the Examiner submits that HAAS shows in Fig. 1A an optical encoder comprising a scale (2, i.e., grid scale) having an optical grating; a plurality of photoreceptor elements that are movable relatively with respect to the scale and that are disposed in relation to the pitch of the optical grating (submitting that when the grid disk (2) is stationary, laser diodes (11) and (12) emit pulses at the same intensity; however, when grid disk is in motion one of the laser diodes is shadowed by grid disk (2) thus altering the light emitting position of the laser diodes); a light source (1, i.e., emission device) having at least two light portions (11 and 12, i.e., laser diodes) which irradiate the photoreceptor elements (elements within photoreceiver (3)) through the scale (2, i.e., grid plate) from at least two different directions; and a controller (combination of control device (7) and evaluation circuit (4)) which changes the light-emitting intensity of the at least two light portions respectively; wherein the controller (combination of control device (7) and evaluation circuit (4)) obtains relative-position information of the scale (2, i.e., grid scale) and the photoreceptor elements (elements within photo receiver (3)) based on the balance (phase difference between the two pulsed LEDs (11) and (12)) of light-emitting intensity difference of the light portions and signals obtained before and after the light-emitting intensity.

Independent Claim 3:

As amended, Applicant's independent Claim 3 now recites, *inter alia*, . . . a light source having a plurality of light emitting elements configured to irradiate the plurality of photoreceptor elements through the scale from different respective directions, *wherein a lighting intensity level of each one of the light emitting elements is independently controlled with respect to the other light emitting elements*; and

a controller configured to adjust the lighting intensity level of the plurality of light emitting elements independently with respect to the other light emitting elements; . . .

On the other hand, HAAS does not teach the aforementioned features. Rather, it appears HASS only discloses maintaining a constant lighting intensity level emitted from each laser diode 11, 12. For instance in paragraph **[0029]**, it is stated "the pulse levels of both pulse trains are equal . . . " .

Therefore, because HAAS does not teach, disclose or suggest, *inter alia*, . . . *wherein a lighting intensity level of each one of the light emitting elements is independently controlled with respect to the other light emitting elements; and a controller configured to adjust the lighting intensity level of the plurality of light emitting elements independently with respect to the other light emitting elements;* . . . , Applicant respectfully submits that HAAS fails to disclose each and every feature of the present invention as recited in independent Claim 3.

Accordingly, Applicant submits that the Examiner has failed to provide an adequate evidentiary basis to support a rejection of Claim 3 under 35 U.S.C. § 102(b) and that the rejection of independent Claim 3 is improper and should be withdrawn.

Newly Submitted Claims are Allowable

Applicant submits that Claim 9 and 10 are allowable at least for the reason that they depend from allowable base Claim 3 and recite additional features that further define the present invention.

Application is Allowable

Applicant respectfully submits that each and every pending claim of the present invention meets the requirements for patentability and respectfully requests the Examiner to indicate allowance of each and every pending claim of the present invention.

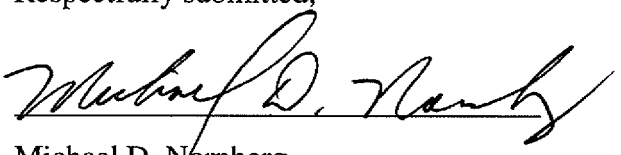
CONCLUSION

Applicant respectfully submits that each and every pending claim of the present application meets the requirements for patentability under 35 U.S.C. §§ 112, 101, 102 and 103, and respectfully requests that the Examiner indicate the allowance of such claims.

Further, any amendments to the claims which have been made in this response and which have not been specifically noted to overcome a rejection based on the prior art, should be considered to have been made for a purpose unrelated to patentability, and no estoppel should be deemed to attach thereto.

Should there be any questions or comments, the Examiner is invited to contact the undersigned at the below-listed telephone number.

Respectfully submitted,

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